

In the interest of expediting prosecution of this application, Applicants submit the following. The present application asserts priority on the disclosure of the '81 case, filed on November 3, 1981, as Ser. No. 317,510, and issued September 15, 1987, as U.S. Pat. No. 4,694,490. The specification is generally addressed to apparatus and methods for automatically controlling the transmission and presentation of information programming, including the application of embedded signaling for a number of functions, including the control over decryption and access, monitoring of usage/availability, control of external equipment, coordination of multiple broadcasts, automated compilation and collection of billing data, and generation and presentation of combined media presentations of broadcast and locally-generated user specific content. (Specification, Abstract; col. 3 line 29 to col. 5 line 27). The specification further discusses coordination and control of programming at several levels of the transmission chain, including transmission stations, intermediate transmission stations, and receiver stations.

Because of the integrated nature of the disclosure, no part of the specification is intended to be considered *in isolation*. However, with regard to the present application, the invention is disclosed, among other places, in the Wall Street Week example as well as in col. 19, lines 5 - 29¹ for all the independent claims including claims 2, 3, 10, 12, 14 and 17. Also, additional support for claim 18, beyond that previously mention, can be

¹ '81 spec. ('490 patent) col. 19, lines 5 - 29 corresponds to the '87 spec. at pp. 249 - 267, pp. 288 - 312 and pp. 427 - 447.

found in col. 15, lines 20 - 25². Support for claim 19 can be found in col. 19, lines 5 - 29 and col. 10, line 14 - col. 12, line 67³. The foregoing is intended to be exemplary only and in no way to limit the claimed invention to the cited passages.

C. Determination of effective filing date

With respect to the Examiner's assertion, in **paragraph 2**, that no attempt will be made to determine the effective filing date of this application, Applicants claims priority under 35 U.S.C. § 120 of the following applications:

| <u>Serial No.</u> | <u>Filing Date</u> | <u>Patent No.</u> |
|-------------------|--------------------|-------------------|
| 08/113,329 | August 30, 1993 | Pending |
| 08/056,501 | May 3, 1993 | 5,335,277 |
| 07/849,226 | March 10, 1992 | 5,233,654 |
| 07/588,126 | September 25, 1990 | 5,109,414 |
| 07/096,096 | September 11, 1987 | 4,965,825 |
| 06/829,531 | February 14, 1986 | 4,704,725 |
| 06/317,510 | November 3, 1981 | 4,694,490 |

Consequently, Applicants will demonstrate disclosure only with respect to the application filed November 03, 1981, having serial no. 06/317,510, issued as patent no. 4,694,490 (the '81 case).

D. Duty to maintain line of patentable demarcation between related patents

² '81 spec. ('490 patent) col. 15, lines 20 - 25 corresponds to the '87 spec. at p. 311, line 16 through p. 312, line 30.

³ '81 spec. ('490 patent) col. 10, line 14 through col. 12, line 67 corresponds to the '87 spec. at pp. 324 - 390.

As to the paragraph numbered 3, Applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming, arguendo, that substantially duplicate claims exist, the Applicants intend to make a good faith effort to alert the PTO of any instances in which the PTO treats such claims inconsistently.

E. Use of alternative claim language

As to the paragraph numbered 4, Applicants acknowledge and appreciate the Examiner's concern over the use of alternative claim language. Applicants assert that they believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, Applicants intend to ensure that the disclosure supports each possible embodiment claimed using alternative claims.

F. Determination of possible non-statutory obvious-type double patenting rejections in related 327 applications

In paragraph 11 of the office action, the Examiner states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related

327 applications over each other will be deferred until a later time.” Applicants submit that the Examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in Examiner’s first Office Action. 37 CFR § 1.104(a) states that “[o]n taking up an application for examination . . . the Examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated.” The MPEP states “[t]he Examiner’s action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the Examiner may be limited to such matters before action is made.” MPEP § 707.07, citing 37 CFR § 1.105. Finally, “[p]iecemeal examination should be avoided as much as possible. The Examiner ordinarily should reject each claim on all valid grounds available” “Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some stereotyped expression.” MPEP § 707.07(g). Applicants submit that the Examiner has a duty to give each application a complete examination, to make rejections with specificity, and that not to defer rejections.

G. Acknowledgment of Multiplicity rejection

With regard to paragraph 10 of the office action discussing that a multiplicity rejection was mailed in the parent file app. ser. no. 07/096,096, Applicants submit that the PTO gave a multiplicity rejection in that case and limited Applicants to 25 claims.

Roughly one hundred claims had been originally filed. There was no substantive review of any of the other claims outside the twenty five. Applicants were not permitted to submit additional claims although a request was made. The Applicants' disclosure addresses too many subject areas to be adequately covered by a small number of claims. Applicants submit that the "nexus" analysis is not required by Applicants.

H. Acknowledgment of Interviews

As to the grouping of paragraphs numbered 21, Applicants acknowledge and appreciate the interviews provided by the PTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action. The Office Action states that "the Group would like to have a complete grouping of applications in a manner that was submitted earlier for only a portion of the total filings." Applicants note that based on the Office Actions received thus far, the PTO does not appear to be following the groupings Applicants submitted previously. The order of examination of Applicants' applications do not seem to have any correspondence to the groupings previously submitted. Applicants, therefore, will not supply further groupings. Applicants will, however, gladly supply further groupings if requested by the PTO for the purpose of following these groupings. Mr. Groody has confirmed in a telephone conversation between Mr. Groody and Mr. Scott that no more groupings need be sent.

In the interest of maintaining a clear record, Applicants respectfully traverse the Office Action's interview summary statement that an offer was made to terminally disclaim the present application with the '81 or '87 patents. Rather, Applicants respectfully submit that their offer was to disclaim a block of copending applications

against one another, provided their issue date was in close enough proximity so as not to result in unnecessarily great losses in patent term duration.

I. Rejections based on 35 U.S.C. §112

1. Rejections based on Metes and Bounds (paragraph 14)

Claims 2 - 22 were also rejected under 35 U.S.C. §112, second paragraph, as indefinite because the Examiner was unable to “determine the meets and bounds of the claims to perform an effective search and analysis over the prior art.” Applicants respectfully submit that this rejection is traversed by the amendment which clarifies the claims in response to the Examiner’s specific objections and rejections. The Office Action states that the “Examiner is not certain that the meets and bounds of these claims can be determined because of the language in the disclosure and claims.” It further states that “[a]pplicants are being requested to reference the claim limitations in this application to the disclosure so that the meets and bounds of these claims can be properly considered.” Applicants traverse this rejection and submit they are under no duty to prospectively reference claim limitations to the specification where the Examiner has not specifically identified what is objected to as indefinite. The M.P.E.P. §2111 states that “[d]uring patent examination, the pending claims must be ‘given the broadest reasonable interpretation consistent with the specification.’” Also, it is only “when the specification provides definitions for terms appearing in the claims that he

specification can be used in interpreting claim language.” M.P.E.P. §2111.01. Applicants respectfully request that this blanket rejection for indefiniteness be withdrawn.

2. Rejections based on Formalities (paragraph 15)

Claims 3 - 13 and 19 - 22 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The following amendments have been made to the claims to overcome the indefinite rejection and place the claims in condition for allowance.

In claim 3, line 7, the term “said” has been inserted just prior to the phrase “event signal” to show antecedent basis has been previously established.

In claim 4, line 2, the term “said” has been inserted just prior to the phrase “event signal”.

In claim 10, lines 7, the term “said” has been inserted just prior to the phrase “event signal”.

In claim 10, line 8, the term “said” has been inserted just prior to the phrase “event location”.

In claim 11, line 2, the term “said” has been inserted just prior to the phrase “event location”.

In claim 12, line 6, the term “said” has been inserted just prior to the phrase “event signal”.

In claim 12, line 6, the term “said” has been inserted just prior to the phrase “event time”.

In claim 13, line 2, the term "said" has been inserted just prior to the phrase "event time".

In claim 19, lines 6 and 7 - 8, the phrase "one or more instruct signals" has been amended to read "said at least one instruct signal".

In claim 21, line 2, the term "said" has been inserted just prior to the term "receiver".

In claim 21, line 3, the term "said" has been inserted just prior to the term "transmitter".

In claim 22, line 2, the term "said" has been inserted just prior to the term "transmitter".

In claim 22, line 7, the phrase "one or more instruct signals" has been amended to read "said at least one instruct signal".

In claim 22, line 11, the phrase "an instruct signal" has been amended to read "said at least one instruct signal".

Applicants' amendments to claims 2 - 22 are believed to have eliminated any indefiniteness issues and therefore, Applicants respectfully request reconsideration of the rejections of claims 2 - 22 under 35 U.S.C. 112, second paragraph for being indefinite.

J. Rejections under 35 U.S.C. §102(e)

1. **Rejections based on Yarbrough as prior art**

Claims 2 and 14 - 17 are rejected under 35 U.S.C. § 102(e) as being anticipated by Yarbrough et al. (4,304,101). Of the aforementioned claims, claims 2, 14 and 17 are independent claims and will be addressed individually below.

With regard to claim 2, the Yarbrough patent does not disclose the controller element that is operatively connected to the demodulator, said controller receiving said information transmission from the processor and detecting the status of the television display, said processor receiving status information from the controller about the television display, said processor at least one of routing and actuating said video storage device to store a selected portion of said information transmission depending on the status of said television display. The recording control 21 in the Yarbrough patent does not actuate the video storage device to store a selected portion of the information transmission depending on the status of the television display. In Yarbrough, the recording control unit 21 is attached to the recording device 19 which may be used for switching the recording device on or off, switching channels or scrambling a signal. The recording control unit is controlled by a central processing unit 22. (Yarbrough, col. 4, lines 1 - 9). This is not the equivalent of routing and actuating the video storage device to store a selected portion of the information transmission depending on the status of the television display. In Yarbrough, there is not reference to the recording control unit 21 performing certain functions based on the status of the television display. Therefore, it is respectfully requested the rejection of record be withdrawn and the claim be allowed to issue.

With regard to claim 14, the Yarbrough patent does not disclose the steps of determining said television monitor is not outputting at least a portion of said received television program and controlling at least one apparatus based on said step of

determining. In Yarbrough, the only type of internal determinations made are those with regard to tampering. "The self destruct block 28 relates to optional circuitry which allows the selective receiving system device to disable itself if it detects evidence of tampering." (Yarbrough, col. 4, lines 24 - 27). This is not the same as determining whether the television monitor is outputting a portion of the television program as claimed in the present invention. Also, without the determining step as discussed above, it is impossible for the Yarbrough system to then control an apparatus based on the determining step. Therefore, it is respectfully requested the rejection of record be withdrawn and the claim be allowed to issue.

Claims 15 - 16 depend upon independent claim 14. As discussed *supra*, Yarbrough fails to disclose every element of claim 14 and thus, *ipso facto*, Yarbrough fails to anticipate dependent claims 15 - 16, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

With regard to claim 17, the Yarbrough patent does not disclose the steps of determining said television monitor is not outputting said at least said portion of said television programming based on said step of informing said television receiver station and performing, under processor control based on said step of determining, at least one of the group consisting of: 1) receiving said at least said portion of said television programming, 2) outputting said at least said portion of said television programming, and 3) storing said at least said portion of said television programming. In Yarbrough, the only type of determining function is that of tampering as discussed above. For the reasons previously stated, the Yarbrough patent does not disclose the claimed invention. Therefore it is respectfully requested the rejection of record be withdrawn and the claim be allowed to issue.

2. Campbell ('791) as prior art

It is the applicant's position that the Campbell et al. patent is not prior art. The Campbell et al. reference claims priority to a continuation of Ser. No. 348,937 filed November 27, 1981, which is a continuation-in-part d (CIP) of Ser. No. 135,987 filed March 31, 1980. The disclosure of the former (the CIP application) is not prior art since the filing date is after that of the pending application. Also, the examiner has not demonstrated that the disclosure of the parent application, filed March 31, 1980, includes the matter which the Examiner applies against the present application to negate patentability under 35 U.S.C. 103. Applicant's submit that since the chain of applications includes a continuation-in-part, then the Examiner may not apply the disclosure of the more recent patent while simultaneously relying on the filing date of the earlier, abandoned application that possibly does not contain the disclosure relied upon to negate patentability in the present application. Assuming *arguendo* that Campbell et al. is a valid reference, Applicants present the following arguments.

3. Rejections based on Campbell as prior art

Claims 3 - 5, 7 - 13 and 18 - 22 are rejected under 35 U.S.C. § 102 (e) as being anticipated by Campbell et al. (4,536,791). Of the aforementioned claims, claims 3, 10, 12, 18 and 19 are independent claims and will be addressed individually.

With regard to claim 3, the Campbell patent does not disclose the step of detecting the absence of said event signal based on said step of informing said receiver station of said event signal. The Campbell patent shows a system whereby there is a comparison between the subscriber addressing data which describes the converter authorization and the channel control word which describes the required authorization

to determine if the subscriber is enabled to receive the selected channel. (Campbell, col. 15, lines 15 - 30). In Campbell there is a comparison of the code words to see if they correspond, this is completely different than detecting the absence of an event signal based on the step of informing the receiver station of the event signal. The code words are data which is transmitted in the vertical interval of the television signals, the comparing of various existing code words comprised of data is not the equivalent of detecting the absence of an event signal. Therefore, it is respectfully requested the rejection of record be withdrawn and the claim be allowed to issue.

Claims 4 - 9, including claim 6, depend upon independent claim 3. As discussed *supra*, Campbell fails to disclose every element of claim 3 and thus, *ipso facto*, Campbell fails to anticipate dependent claims 4 - 9, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

With regard to claim 10, the Campbell patent does not disclose the step of informing the programmable receiver station of a variable event location. Campbell discloses a system having a channel control word 200 that is generated by the PCS to define the codes required for access to each television program being transmitted. The codes identify the program to the converter so a determination can be made as to whether the converter will be enabled to process the television signal to the television set. The channel word also includes a program identification code to indicate whether the program in question is a special event requiring further limitation on access. (Campbell, col. 13, lines 1 - 15) The channel words define the codes which identify the programs and indicate whether they are a special event, these channel words are not variable event locations as used in the claimed invention. They do not define a location, but merely identify the programs. The channel enable code 216 in the Campbell system is also not the equivalent of a variable event location in the present invention. The channel enable code provides bit information indicating which of the frequency

channels may be viewed, which is completely different from informing of a variable event location. In other words, determining if a channel to be enabled is different from informing of the location of an event.

Campbell does not show the step of detecting one of the presence and the absence of said event signal *based on said step of informing said receiver station of said variable event location*. The Campbell reference shows a system whereby there is a comparison between the subscriber addressing data which describes the converter authorization and the channel control word which describes the required authorization to determine if the subscriber is enabled to receive the selected channel. (Campbell, col. 15, lines 15 - 30). In Campbell there is a comparison of the code words to see if they correspond, this is completely different than detecting one of the presence and the absence of an event signal. In Campbell, the step of detecting comes prior to the informing the receiver station of the variable event location and therefore cannot be based on said step of informing. The Campbell system compares codes and if the threshold is met, the program is enabled. Thus, the Campbell system detects in the comparison step and then informs after the comparison is made which is not the same as detecting based on the step of informing as claimed in the present invention. Therefore, it is respectfully requested the rejection of record be withdrawn and the claim be allowed to issue.

Claim 11 depends upon independent claim 10. As discussed *supra*, Campbell fails to disclose every element of claim 10 and thus, *ipso facto*, Campbell fails to anticipate dependent claim 11, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

With regard to claim 12, the Campbell patent does not disclose the step of informing the programmable receiver station of an event time. In Campbell, "[t]he

event enable word 220 is generated by the PCS 50 and transmitted to the converter 40 where it is stored in converter control logic 104. Only by having the appropriate codes in logic 104 at the time the program event is broadcast, can a subscriber view the program on the indicated channel. Thus the event enable word controls access at a particular time on a given channel during which a special event is transmitted.”

(Campbell, col. 14, lines 1 - 9). The Campbell system has codes stored in logic which is then compared with an enable code in the program when it is broadcast, if the codes are the same, the program is enabled. This is not the same as informing the programmable receiver station of an event time as claimed. In Campbell, the codes which are stored are later used for comparison purposes and not to indicate a specific time of an event. The time of the event in Campbell is known when the event is actually enabled.

Campbell does not show the step of detecting one of the presence and the absence of said event signal *based on said step of informing said programmable receiver station of said event time* for the reasons stated above. Therefore, it is respectfully requested the rejection of record be withdrawn and the claim be allowed to issue.

Claim 13 depend upon independent claim 12. As discussed *supra*, Campbell fails to disclose every element of claim 12 and thus, *ipso facto*, Campbell fails to anticipate dependent claim 13, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

With regard to claim 18, the Campbell patent does not disclose the steps of A) storing operating instructions at a remote data source, said operating instructions enabling said receiver station to detect and react to one of the presence and the absence of said event signal; B) receiving at said remote data source a query from said receiver station; C) transmitting said operating instructions from said remote data source to said receiver station in response to said step of receiving said query, said receiver station

selecting and storing at least some of said operating instructions; and D) transmitting from a second data remote source to said receiver station a signal which controls said receiver station to at least one of locate and process said event signal based on said operating instructions. The Campbell patent shows a system whereby there is a comparison between the subscriber addressing data which describes the converter authorization and the channel control word which describes the required authorization to determine if the subscriber is enabled to receive the selected channel. (Campbell, col. 15, lines 15 - 30). In Campbell there is a comparison of the code words to see if they correspond, this is completely different from storing operating instructions at a remote data source, said operating instructions detecting at least one of the presence and the absence of an event signal. The code words are data which is transmitted in the vertical interval of the television signals, therefore, comparing various existing code words comprised of data is not the equivalent of detecting and reacting to the absence of an event signal (step A).

In the Campbell patent, the remote computer identified in Fig. 1 is not identified as functioning the same, nor can it be assumed, as the remote data source claimed in the present invention. Campbell states, "[t]he central data control system preferably has a two-way interface link 13 with a remote computer which may be used for central control and billing functions." (Campbell, col. 4, lines 30 - 33). The programming control system is preferably connected by a two-way data link to a remote computer for use in various function. (Campbell, col. 5, lines 2 - 4). In both references to the remote computer, the remote computer does not receive a query from the receiver station, nor can it be assumed. While Campbell does state there is a two-way interface link between the remote computer and the central control system, this is not the equivalent of receiving a query from the receiver station as claimed in the present invention (step B). Also, without the step of receiving a query, the steps of transmitting said operating

instructions from said remote data source (step C and the step of transmitting a signal from a second remote source to the receiver station (step D) cannot be carried out as they depend on the receiving step.

According to the rationale set forth in the office action, the head end station 11 is the receiver station and the remote computer is the same as the claimed remote data source. However, following that rationale, the Campbell system would not carry out the step of transmitting said operating instructions from said remote data source to said receiver station in response to said step of receiving said query, said receiver station selecting and storing at least some of said operating instructions. In Campbell, as disclosed in Fig. 2, the head end station primarily generates data and combines it with video signals to be used for comparison purposes later in the process. (Campbell, col. 4, line 64 - col. 5, line 51). There is no selection process or storing of operating instructions identified in Campbell at the head end station all of which is in response to the remote computer receiving a query (step C).

Campbell fails to disclose the step of transmitting from a second remote source to said receiver station a signal which controls said receiver station to at least one of locate and process to said event signal based on said operating instructions (step D). Campbell states,, "[a] text formatter system 54 receives data from a wide variety of sources such as weather, news, stock and others which are formatted for video transmission and then selectively transmitted in text form to the plurality of HVP units 52,53". (Campbell, col. 5, lines 5 - 9). The second remote sources in the Campbell reference do not control the receiver station to locate or process the event signal based on the operating instructions as claimed in the present invention, they merely transmit data to the text formatter system. Therefore, it is respectfully requested the rejection of record be withdrawn and the claim be allowed to issue.

With regard to claim 19, the Campbell patent does not disclose the step of receiving at said transmitter station at least one digital control signal which, at the receiver station, operates to communicate said at least one digital instruct signal to said at least one processor.

The Campbell patent shows a system where “[i]f the threshold is not exceeded, then the converter is enabled for processing of the television signal. As shown at step 332, the video descrambler 116 is enabled to process the video signal of the selected television program and the audio level/mute control unit 120 is enabled to transmit the audio signal to the television set.” (Campbell, col. 15, lines 59 - 65). The office action discusses the instruct and control signals as being those found in Fig. 11, the enablement codes. However, the enablement codes are used for comparison purposes and not for instruction or control as claimed in the present invention. As stated in the previous quote, the codes are compared and the converter is then enabled for processing of the television signal, all of which transpires at the receiver station. The Campbell reference does not disclose receiving at the transmitter station at least one digital control signal which operates to communicate said at least one digital instruct signal to said at least one processor as claimed in the present invention. Therefore, it is respectfully requested the rejection of record be withdrawn and the claim be allowed to issue.

Claims 20 - 22 depend upon independent claim 19. As discussed *supra*, Campbell fails to disclose every element of claim 19 and thus, *ipso facto*, Campbell fails to anticipate dependent claims 20 - 22, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

4. Summary

Applicants respectfully submit that each of the pending claims clearly contain elements or an element which is absent in the cited reference, therefore precluding a rejection under 35 U.S.C. § 102. Applicants further submit that the subject matter of each claim would not have been obvious to one of ordinary skill in the art at the time the invention was made. Applicants respectfully request that the rejections of the pending claims be withdrawn and all claims be permitted to issue.

K. Rejections under 35 U.S.C. §103 over Campbell in view of Hedger

Claim 6 is rejected under 35 U.S.C. § 103 as being unpatentable over Campbell et al. in view of the Hedger reference (Broadcast Telesoftware: Experience with ORACLE by John Hedger copyright 1980).

Claim 6 depends upon independent claim 3. The Campbell reference, as modified by the Hedger reference, does not disclose the claimed invention for the reasons as stated above with regard to independent claim 3. Therefore, it is respectfully requested the rejection of record with regard to claim 6 be withdrawn and the claim be allowed to issue.

L. Introduction of new claim 23

The new claim 23 does not introduce any new matter into the application. The support for such claims can be found in the previously mentioned areas of the specification.

L. Rejections based on the judicially created doctrine of non-statutory, non-obvious type double patenting

The Examiner's rejection of claims 2 - 22 under the judicially created doctrine of non-statutory, non-obvious type double patenting over the patented claims in U.S. patents 4,694,490; 4,704,725; 4,965,825 and 5,109,414 is hereby traversed.

In this application, the PTO fails to specifically identify all claims from cited Harvey patents that cover specific claims in the present application. Rather, the Office Action references "representative claims" from patents and the present application. The Office Action does not cite specific elements from claims in a patent covering specific elements in claims in the application. In fact, the Office Action acknowledges that the patent claims and application claims are directed to different elements, but states that this "does not prohibit this rejection if there is common or interrelated subject matter recited." The Office Action then references Schneller in support of this erroneous statement, not supported by Schneller.

As to the rejection of Applicants' claims under non-statutory, non-obvious type double patenting, Applicants traverse the Examiner's double patenting rejection on three separate grounds which are set forth in the reply brief of Serial No. 08/113,329 (Atty Docket No. 05634.008), incorporated herein by reference. For the sake of brevity, these arguments will not be set forth herein; the Examiner is respectfully directed to the above-mentioned reply brief.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and

distinct standard was the main factor in the Schneller court's determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted this phrase. This phrase means independent 'or' distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning "that there is no disclosed relationship between the two or more subjects disclosed" and that they are not connected. The MPEP defines the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed" Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, Applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey U.S. Patents 4,694,490 and 4,704,725.

1. Representative claim 7 of the U.S. patent 4,694,490 as applied to the present application claim 19

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents

a combined display of the television program and overlay video signals, said display being specific to a particular user.

Present application claim 19, as amended, relates to a method of controlling at least one of a plurality of receiver stations, said method comprising the steps of: A) receiving at a transmitter station said at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter; B) receiving at said transmitter station at least one control signal which, at the receiver station, operates to communicate said at least one instruct signal to said at least one processor; and C) transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal.

Patent claim 7 does not cover present application claim 19. Patent claim 7 relates to instruct-to-overlay signals that are processed by a computer and received by a television receiver which presents a combined display of the instruct-to-overlay signal and a television program. This application claim 19 relates to the steps of receiving at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter; receiving at least one control signal which operates to communicate said at least one instruct signal to said at least one processor; and transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal. The two claims are capable of

separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

| U.S. patent 4,694,490, claim 7 | Present application, claim 19 (amended) |
|---|---|
| <p>In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct-to-overlay signal are transmitted to said receiver stations, the steps of:</p> <p>receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations</p> <p>detecting the presence of said instruct-to-overlay signal at said selected receiver stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and</p> <p>causing the computers at said selected</p> | <p>A method of controlling at least one of a plurality of receiver stations each of said plurality of receiver stations includes a mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to at least one instruct signal, and with each said receiver station adapted to detect and respond to at least one instruct signal, said method comprising the steps of:</p> <p>receiving at a transmitter station said at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter;</p> <p>receiving at said transmitter station at least one control signal which, at the receiver station, operates to communicate said at least one instruct signal to said at least one processor; and</p> <p>transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal.</p> |

receiver stations to generate and transmit their overlay video signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

2. Representative claim 3 of the U.S. patent 4,704,725 as applied to the present application claim 19

Patent 4,704,725, claim 3 claims a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can modify the user specific signals by processing modification control signals. The computers communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal.

Present application claim 19, as amended, relates to a method of controlling at least one of a plurality of receiver stations, said method comprising the steps of: A) receiving at a transmitter station said at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter; B) receiving at said transmitter station at least one control signal which, at the receiver station, operates to communicate said at least one instruct signal to said at least one processor; and C)

transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal.

Patent claim 3 does not cover present application claim 19. Patent claim 3 relates to the communication of user specific signals. This application claim 19 relates to the steps of receiving at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter; receiving at least one control signal which operates to communicate said at least one instruct signal to said at least one processor; and transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

| U.S. patent 4,704,725, claim 3 | Present application, claim 19 (amended) |
|--|---|
| <p>A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the</p> | <p>A method of controlling at least one of a plurality of receiver stations each of said plurality of receiver stations includes a mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to at least one instruct signal, and with each said receiver station adapted to detect and respond to at least one instruct signal, said method comprising the steps of: receiving at a transmitter station said at least one instruct signal which is operative at said at least one receiver</p> |

corresponding user specific information is not being transmitted to an output device; detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter;

receiving at said transmitter station at least one control signal which, at the receiver station, operates to communicate said at least one instruct signal to said at least one processor; and

transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal.

3. Representative claim 24 of the U.S. patent 4,965,825 as applied to the present application claim 19

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user".

Present application claim 19, as amended, relates to a method of controlling at least one of a plurality of receiver stations, said method comprising the steps of: A) receiving at a transmitter station said at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter; B) receiving at said transmitter station at least one control signal which, at the receiver station, operates to communicate said at least one instruct signal to said at least one processor; and C) transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal.

Patent claim 24 does not cover present application claim 19. Claim 24 relates to user specific signals sent from the receiver station to an output device. This application claim 19 relates to the steps of receiving at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter; receiving at least one control signal which operates to communicate said at least one instruct signal to said at least one processor; and transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,965,825, claim 24

Present application, claim 19 (amended)

In a method of generating computer

output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of: transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output information content does not exist, and causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

A method of controlling at least one of a plurality of receiver stations each of said plurality of receiver stations includes a mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to at least one instruct signal, and with each said receiver station adapted to detect and respond to at least one instruct signal, said method comprising the steps of:

receiving at a transmitter station said at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter;

receiving at said transmitter station at least one control signal which, at the receiver station, operates to communicate said at least one instruct signal to said at least one processor; and

transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal.

4. Representative claim 15 of the U.S. patent 5,109,414 as applied to the present application claim 19.

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a

processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor.

Present application claim 19, as amended, relates to a method of controlling at least one of a plurality of receiver stations, said method comprising the steps of: A) receiving at a transmitter station said at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter; B) receiving at said transmitter station at least one control signal which, at the receiver station, operates to communicate said at least one instruct signal to said at least one processor; and C) transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal.

Patent claim 15 does not cover present application claim 19. Patent claim 15 relates to a data system that receives and processes data from a data source and includes a processor that controls the functions of a matrix switch and a storage device. This application claim 19 relates to the steps of receiving at least one instruct signal which is operative at said at least one receiver station to react to the absence of an event signal and delivering the instruct signal to a transmitter; receiving at least one control signal which operates to communicate said at least one instruct signal to said at least one processor; and transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

In a signal processing system,
a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means,
a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means,
a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data,
a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and
a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.

A method of controlling at least one of a plurality of receiver stations each of said plurality of receiver stations includes a mass medium program receiver, at least one output device, a control signal detector, at least one processor capable of responding to at least one instruct signal, and with each said receiver station adapted to detect and respond to at least one instruct signal, said method comprising the steps of:

receiving at a transmitter station said at least one instruct signal which is operative at said at least one receiver station to react to one of the presence and the absence of an event signal and delivering the instruct signal to a transmitter;

receiving at said transmitter station at least one control signal which, at the receiver station, operates to communicate said at least one instruct signal to said at least one processor; and

transferring said at least one control signal to said transmitter, said transmitter transmitting said at least one instruct signal and said at least one control signal.

Claims 2 - 22 are rejected under the judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and other listed U.S. applications. Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection until one or more of the copending applications issues, at which time the rejection can be made non-provisional. Applicants respectfully request that this rejection be withdrawn.

Also, although the rejection is stated as a judicially created obviousness double patenting rejection, the Examiner's arguments are those of a Schneller non-obviousness, non-statutory double patenting rejection. Applicant's reply brief addresses the merits of the Schneller-type rejection.

Applicants traverse the assertion that a double patenting situation exists.

III. CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, that all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Respectfully submitted,



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